Technical Data Sheet

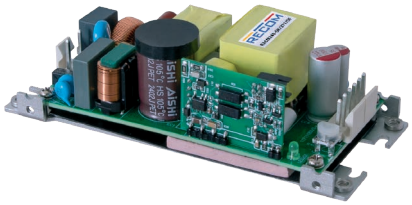
# RACM240-K Series ◊ AC/DC Power Supply

240W ◊ Input: 100V-277VAC

RECOM
AC/DC Converter

## FEATURES

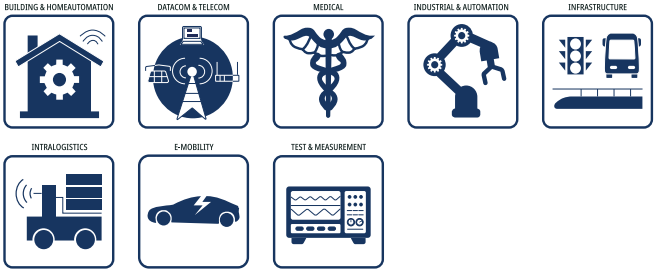
- Operating Input Voltage: 85V-305VAC
- 145/170W low/high line still air convection ratings
- 330W boost power for up to 5s
- Options: AC-fail; 5VSB out; CTRL ON/OFF; Sensing
- 90% plus Efficiency, starting from 25W loads
- OVC III up to 2000m altitude; 5000m: OVC II
- 2”x4” footprint plus mounting flanges
- Open frame or enclosed construction
- 3 year warranty






Open frame: 122.6 x 55.2 x 37.0mm (4.82 x 2.17 x 1.45 inch)
Enclosed: 122.6 x 62.2 x 38.0mm (4.82 x 2.44 x 1.49 inch)

## APPLICATIONS




## SAFETY & EMC

Reach compliant

RoHS² compliant 10 from 10

c UL us E224736

IECEE CB SCHEME

HOUSEHOLD CERTIFIED EN-60335-1

## DESCRIPTION

The RACM240-K series combines up to 330W peak power with advanced thermal management in a compact AC/DC power supply design. Its integrated thermally conductive baseplate enables efficient heat transfer to the application chassis, enhancing cooling performance particularly in fanless systems. Delivering 240W with forced-air cooling and up to 170W at high line or 145W at low line under natural convection, the series offers extended convection/conduction ratings of up to 190W or 220W, depending on the output voltage model. Based on a compact 2”×4” PCB footprint with additional mounting tabs, the series supports demanding industrial and medical applications with universal 85–305VAC input, -40°C to +85°C operation, OVC III rating, medical-grade 2MOPP isolation, and integrated EN55032 Class B filtering for easy system integration. Efficiency exceeding 90% from just 25W load and up to 300mW standby output power at less than 0.5W input consumption further enhance its versatility. Optional features include AC-fail indication, a 5V standby output (5VSB), remote ON/OFF control, and remote output voltage sensing.

## SELECTION GUIDE

| Part Number | Operating Input Range [VAC] | Output Voltage nom. [VDC] | Output Current nom. [A] | Boost Current max (1) [A] | Efficiency (2) typ. [%] | Output Power continuous [W] |
|---|---|---|---|---|---|---|
| RACM240-12SK/277 (3,4) | 85-305 | 12 | 20 | 25 | 92 | 240W |
| RACM240-15SK/277 (3,4) | 85-305 | 15 | 16 | 20 | 93 | 240W |
| RACM240-24SK/277 (3,4) | 85-305 | 24 | 10 | 13.75 | 93 | 240W |
| RACM240-36SK/277 (3,4) | 85-305 | 36 | 6.67 | 9.2 | 93 | 240W |
| RACM240-48SK/277 (3,4) | 85-305 | 48 | 5 | 6.9 | 93 | 240W |
| RACM240-54SK/277 (3,4) | 85-305 | 54 | 4.44 | 6.1 | 93 | 240W |

Note1: Refer to “**„Boost Power Duty Cycle“.**
Note2: Efficiency is tested at nominal input and rated load at +25°C ambient.

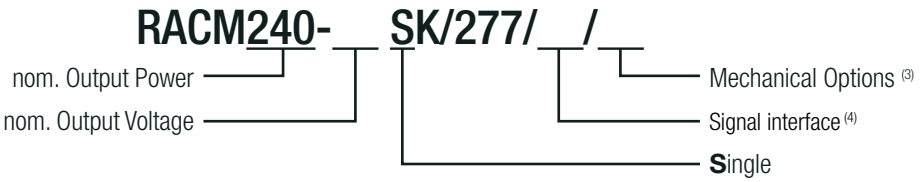
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# RACM240-K Series ◊ AC/DC Power Supply

240W ◊ Input: 100V-277VAC

RECOM AC/DC Converter

## MODEL NUMBERING




Note3: "/OF"= 4.82" x 2.17" open frame version, u-channel.
"/ENC"= 4.82" x 2.44" enclosed version.

Note4: "/SI"= open frame or enclosed version with Signal Interface connector

## ORDERING INFORMATION

| Model | Output Voltage | Package Type | | |
|---|---|---|---|---|
| | | "/OF" & "/SI/OF models | "/ENC" & "/SI/ENC models | "/ONB" & "/SI/ONB models |
| RACM240-12SK/277 | 12VDC | y | y | on request |
| RACM240-15SK/277 | 15VDC | y | y | on request |
| RACM240-24SK/277 | 24VDC | y | y | on request |
| RACM240-36SK/277 | 28VDC | y | y | on request |
| RACM240-48SK/277 | 36VDC | y | y | on request |
| RACM240-54SK/277 | 48VDC | y | y | on request |

y= standard portfolio; on request= MOQ may apply on project base

## BASIC CHARACTERISTICS (measured @ $T_{AMB}$= 25°C, nom. $V_{IN}$, full load and after warm-up unless otherwise stated)

| Parameter | Condition | | Min. | Typ. | Max. |
|---|---|---|---|---|---|
| Nominal Input Voltage | 50/60Hz | | 100VAC | | 277VAC |
| Operating Range (5) | 47-63Hz | | 85VAC | | 305VAC |
| Input Current | 115VAC | | | 2.3A | 4A |
| | 230VAC | | | 1.15A | |
| | 277VAC | | | 0.95A | |
| Inrush Current | cold start at 25°C | 115VAC | | | 40A |
| | | 230, 277VAC | | | 70A |
| No Load Power Consumption | standard models | 230VAC | | 220mW | 500mW |
| | "/SI" models | 230VAC, 5VSB unloaded | | | 700mW |
| Ecodesign Standby Mode Use (Available output power for stated input power) | 115/230/277VAC | $P_{IN}$= 0.5W | | 0.25W | |
| | | $P_{IN}$= 1.0W | | 0.7W | |
| | | $P_{IN}$= 2.0W | | 1.6W | |
| Input Frequency Range | AC input | | 47Hz | | 63Hz |
| Minimum Load | | | 0% | | |
| Power Factor | 115VAC | | | 0.99 | |
| | 230, 277VAC | | | 0.98 | |
| Start-up time | main & fan output | @full load, 230VAC | | | 600ms |
| | 5VSB | only for "/SI" models | | | 5ms |
| Rise time | main & fan output | @full load, 230VAC | | | 20ms |
| | 5VSB | only for "/SI" models | | | 4.5ms |
| Hold-up time | main & fan output | @full load, 230VAC | 10ms | | |
| | 5VSB | only for "/SI" models | 300ms | | |
| Internal Operating Frequency | | | | | 150kHz |
| Output Ripple and Noise (6) | 20MHz BW, $T_{AMB}$= +25°C | standard models | | | 120mVp-p |
| | | "/SI" versions | | | 100mVp-p |

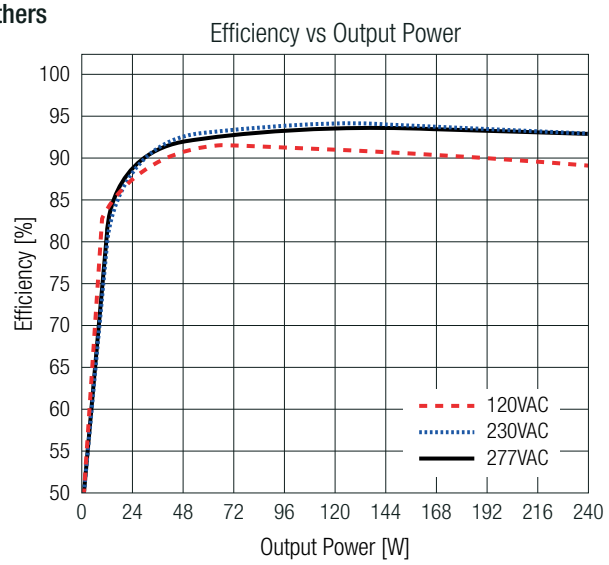
Note5: The products were submitted to all safety files at AC-operation (90V-305VAC)

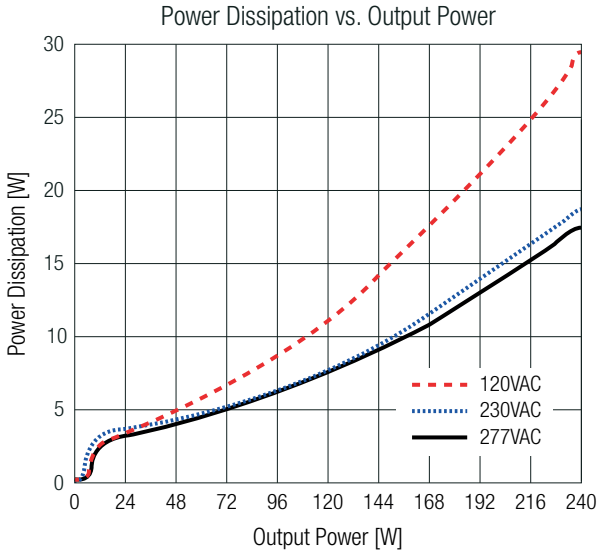
Note6: Measurements are made with a 0.1µF MLCC & 10µF E-cap in parallel across output (low ESR).
The test setup can have an impact on ripple noise values (placement of scope probe, capacitors, it's specifications, wires, PCB tracks, distances, etc.)

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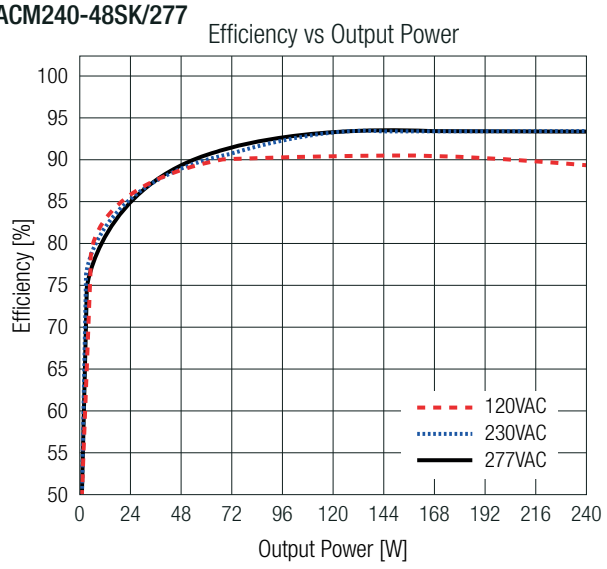
## BASIC CHARACTERISTICS (measured @ $T_{AMB}$= 25°C, nom. $V_{IN}$, full load and after warm-up unless otherwise stated)

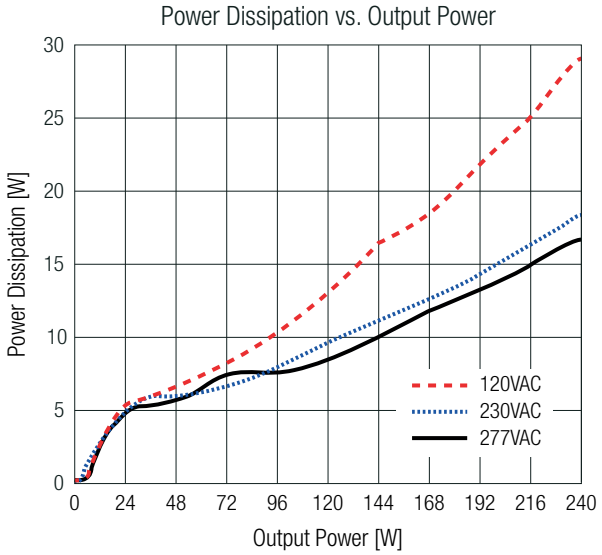
### others




### RACM240-48SK/277




## ADDITIONAL FEATURES

| Parameter | Condition | | Min. | Typ. | Max. |
|---|---|---|---|---|---|
| Output Voltage Adjustability [7] | on-board trim potentiometer | RACM240-12SK/277 | 10.8VDC | | 13.2VDC |
| | | RACM240-15SK/277 | 13.8VDC | | 16.2VDC |
| | | RACM240-24SK/277 | 22.1VDC | | 25.9VDC |
| | | RACM240-36SK/277 | 33.9VDC | | 38.1VDC |
| | | RACM240-48SK/277 | 45.2VDC | | 50.8VDC |
| | | RACM240-54SK/277 | 50.9VDC | | 57.3VDC |
| DC ON LED | LED = green | | normal working mode | | |
| | LED = off | | no operation or failure | | |
| Standby Power | only for "/SI" models | 230VAC, 5VSB un-loaded | | 400mW | |
| Soft Start Time | | start with ON/OFF CTRL | | 70ms | |
| Input Current of CTRL Pin | | $V_{ON/OFF}$= 3V | | 1mA | |
| ON/OFF CTRL | | mains and fan output ON | open or 0.5 < $V_{ON/OFF}$ < 5V | | |
| | | mains and fan output OFF | short or $V_{ON/OFF}$ < 0.5V | | |
| AC_Fail | | | refer to **„AC_Fail"** | | |
| Remote Sense | | stay unconnected when not used | refer to **„Remote Sense"** | | |

Note7: By trimming up, decrease output current to avoid exceeding rated output power. By trimming down, do not exceed maximum continuous output current. If enclosed version is used, please remove cover, to use trim function.

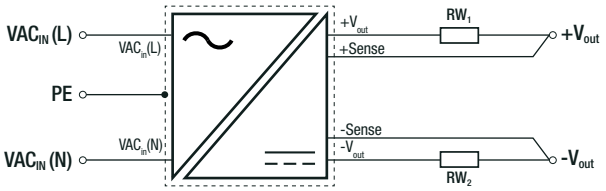
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## ADDITIONAL FEATURES

### AC_Fail

The AC FAIL signal is referenced to SGND. A 10 kΩ pull-up resistor connected to the +5 V output of CON4 is recommended.
When the AC input voltage exceeds typically 85 VAC RMS, a square-wave signal can be measured between the AC FAIL pin and SGND using an oscilloscope.
When the AC input voltage falls below typically 70 VAC RMS, no signal is present at the AC FAIL pin.

### Remote Sense




## FAN OUTPUT (MEASURED @ TAMB= 25°C, NOM. VIN, FULL LOAD AND AFTER WARM-UP UNLESS OTHERWISE STATED)

| Parameter | Condition | Min. | Typ. | Max. |
|---|---|---|---|---|
| Fan Output Voltage | | | | 12VDC |
| Fan Output Current [8] | | | | 0.5A |
| Fan Output Accuracy | | | | ±11.0% |
| Short Circuit Protection (SCP) | | | | none |
| Over Current Protection (OCP) | | | | none |

Note8: For the normal operation of fan output, mains output needs minimum load 30W. Fan output is not allowed to be loaded if mains output has no load.

## 5VSB OUTPUT [9] (MEASURED @ TAMB= 25°C, NOM. VIN, FULL LOAD AND AFTER WARM-UP UNLESS OTHERWISE STATED)

| Parameter | Condition | Min. | Typ. | Max. |
|---|---|---|---|---|
| Standby Output Voltage | always on | | 5VDC | |
| Standby Output Current | | | | 1A |
| Max. Output Power | | | | 5W |
| Short Circuit Protection (SCP) | below 100mΩ | | | hiccup mode, auto recovery |
| Over Voltage Protection (OVP) | | | | <8VDC, hiccup mode, auto recovery |
| Over Current Protection (OCP) | | | | <2A, hiccup mode, auto recovery |
| Over Temperature Protection (OTP) | | | | restart after cooling down |

Note9: There is no galvanic isolation between AUX GND and Main Output GND. Regulations for 5VSB Output are stated under „Regulations“

## REGULATIONS (measured @ $T_{AMB}$= 25°C, nom. $V_{IN}$, full load and after warm-up unless otherwise stated)

| Parameter | Condition | | Value |
|---|---|---|---|
| Output Accuracy | | | ±2.0% max. |
| Line Regulation | low line to high line, full load | | ±1.0% max. |
| Load Regulation [10] | 10% to 100% load | standard models | 1.5% max. |
| | | "/SI" models | 1.0% max. |
| Transient Response | 10%-100%-10% load change steps | others | 1000mV |
| | | RACM240-54SK/277 | <10% of Vout |
| | recovery time | | 3ms |

Note10: Operation below 10% load will not harm the converter, but specifications may not be met.

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## PROTECTIONS (measured @ $T_{AMB}$= 25°C, nom. $V_{IN}$, full load and after warm-up unless otherwise stated)

| Parameter | Type | | | Value |
|---|---|---|---|---|
| Internal Input Fuse (11) | | | | 2x 6.3A slow blow type |
| Short Circuit Protection (SCP) | below 100mΩ | | | hiccup mode, auto recovery |
| Over Voltage Protection (OVP) | standard models | | RACM240-12SK/277 | <18VDC, latch off |
| | | | RACM240-15SK/277 | <21VDC, latch off |
| | | | RACM240-24SK/277 | <32VDC, latch off |
| | | | RACM240-36SK/277 | <45VDC, latch off |
| | | | RACM240-48SK/277 | <62VDC, latch off |
| | | | RACM240-54SK/277 | <68VDC, latch off |
| Over Voltage Category (OVC) | according to 62368-1, 60601-1, 61558, 60335-1 | | | OVC II (5000m) |
| | according to 62368-1, 61558, 60335-1 | | | OVC III (2000m) |
| Over Current Protection (OCP) | standard models | | RACM240-12SK/277 | <50A, hiccup mode, auto recovery |
| | | | RACM240-15SK/277 | <22A, hiccup mode, auto recovery |
| | | | RACM240-24SK/277 | <17A, hiccup mode, auto recovery |
| | | | RACM240-36SK/277 | <11A, hiccup mode, auto recovery |
| | | | RACM240-48SK/277<br>RACM240-54SK/277 | <9A, hiccup mode, auto recovery |
| Over Temperature Protection (OTP) | | | | shut down, auto recovery when temperatue back to normal |
| Class of Equipment | | | | Class I or Class II |
| Isolation Voltage (12) | I/P to O/P | 1 minute | according to 60601-1 | 4k43VAC |
| | | | according to 61558 | 4kVAC |
| | | | according to 62368-1 | 6kVDC |
| Isolation Resistance | | | | 1GΩ min. |
| Isolation Capacitance | | | | 100pF max. |
| Insulation Grade | I/P to O/P | | | reinforced |
| Means of Protection | | | | 2MOPP |
| Touch Current | 264VAC/63Hz | | normal condition | <100µA |
| | | | single fault | <500µA |

Note11: For system integration with DC operation, consider a suitable DC fuse in front of the input.
Note12:For repeat Hi-Pot testing, reduce the time and/or the test voltage.

## ENVIRONMENTAL (measured @ $T_{AMB}$= 25°C, nom. $V_{IN}$, full load and after warm-up unless otherwise stated)

| Parameter | Condition | | Value |
|---|---|---|---|
| Operating Ambient Temperature Range | @ natural convection (0.1m/s) | | -30°C to +85°C |
| Max. Case Temperature | | | +100°C |
| Operating Altitude (13) | according to 62368-1, 60601-1, 61558, 60335-1 | | 5000m (OVC II) |
| | according to 62368-1, 61558, 60335-1 | | 2000m (OVC III) |
| Operating Humidity | non-condensing | | 90% RH typ. |
| Pollution Degree | | | PD2 |
| Vibration | | | half Sine 100m/s², 11ms duration, 100 pulse per direction |
| Shock | | | 5-500Hz, 20m/s² 15 min for each axis |
| MTBF | 100VAC | $T_{AMB}$= 25°C | 330 x 10³ hours |
| | | $T_{AMB}$= 40°C | 290 x 10³ hours |
| | 230VAC | $T_{AMB}$= 25°C | 340 x 10³ hours |
| | | $T_{AMB}$= 40°C | 290 x 10³ hours |
| Design Lifetime | 230VAC, forecd air 1m/s, 240W Load | | 39 x 10³ hours |
| | 230VAC, 0.1m/s, 160W Load | | 55 x 10³ hours |

Note13: Recognized by safety agency for safe operation up to 5000m. High altitude operation may impact the performance and lifetime. Please contact RECOM tech support for advice.

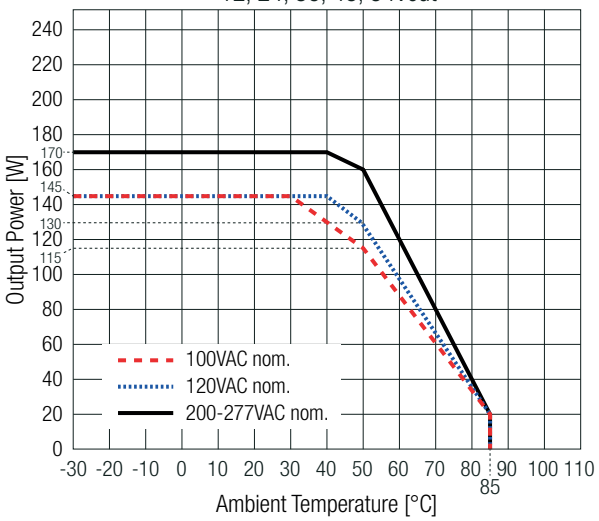
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## ENVIRONMENTAL (measured @ $T_{AMB}$= 25°C, nom. $V_{IN}$, full load and after warm-up unless otherwise stated)

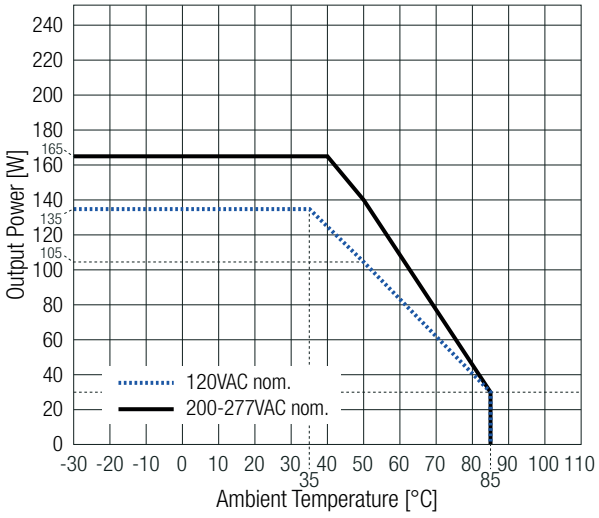
### Convection cooled rating @ still air <0.1m/s (14)

**"/OF" Versions**

12, 24, 36, 48, 54Vout

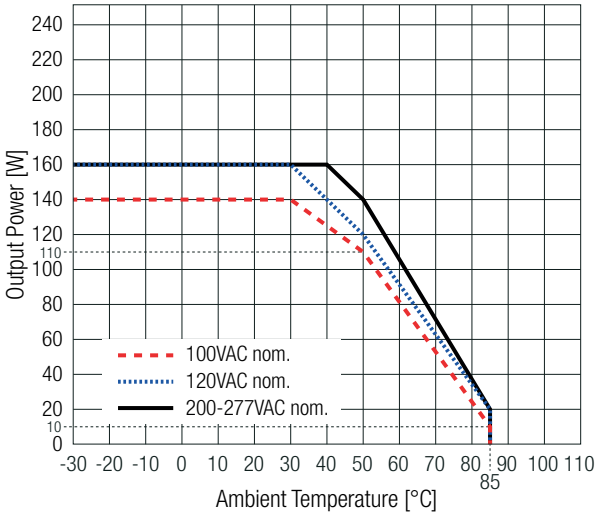



15Vout

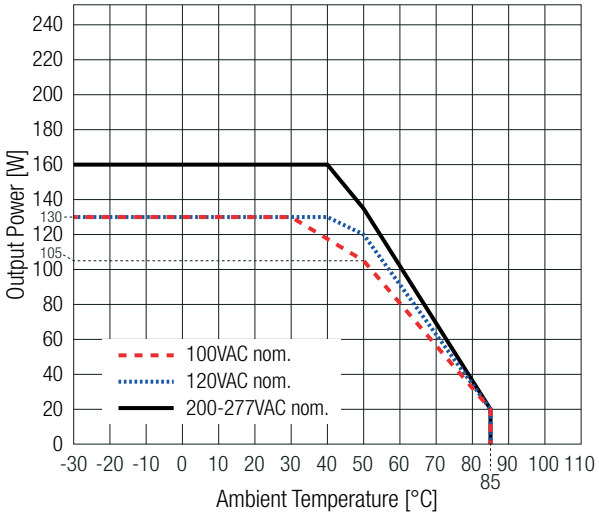



**"/ENC" Versions**

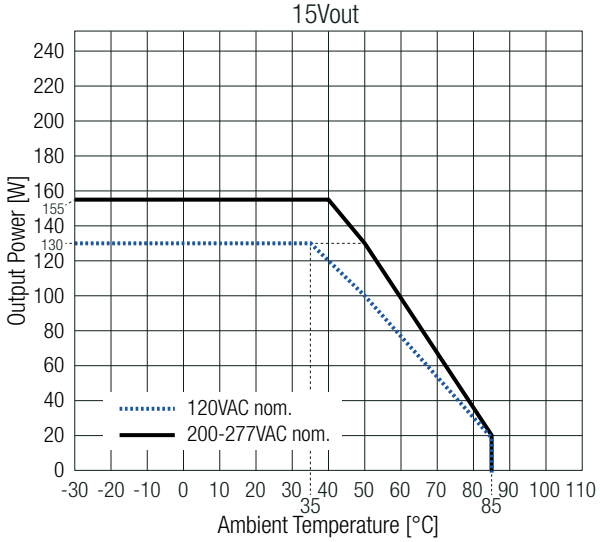
12, 24, 36Vout




48, 54Vout




15Vout




Note14:The input voltage range covered by UL/IEC 60601-1 is limited to 100–240VAC.
The full 100–277VAC input range is covered by all other applicable standards.

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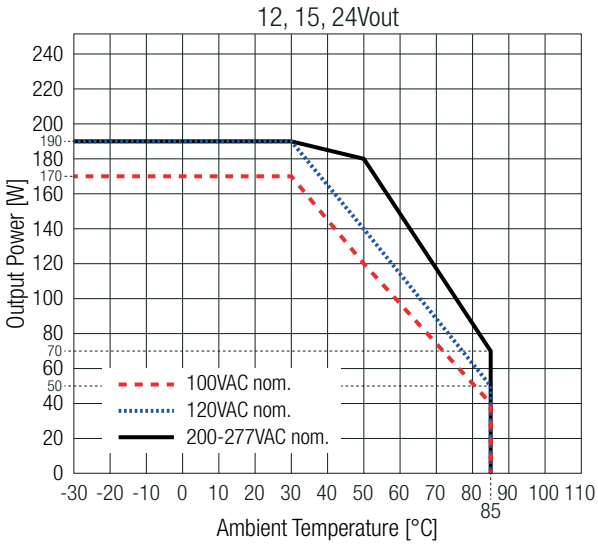
# RACM240-K Series ◊ AC/DC Power Supply

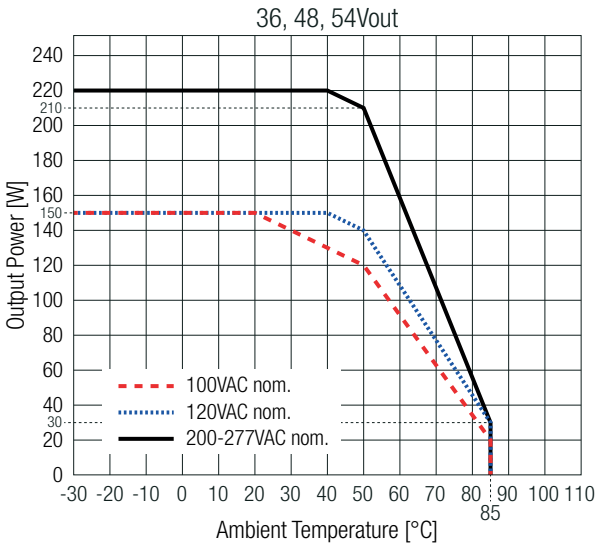
240W ◊ Input: 100V-240VAC

RECOM AC/DC Converter

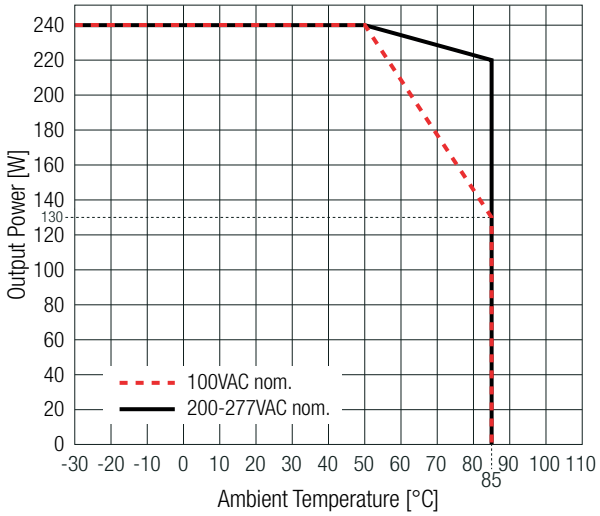
## ENVIRONMENTAL (measured @ $T_{AMB}$= 25°C, nom. $V_{IN}$, full load and after warm-up unless otherwise stated)

### Conduction cooled rating with 2mm Alu-plate A5 (14)




### Air flow rating @ 2.5m/s and 2cm stand-off pillars (14)



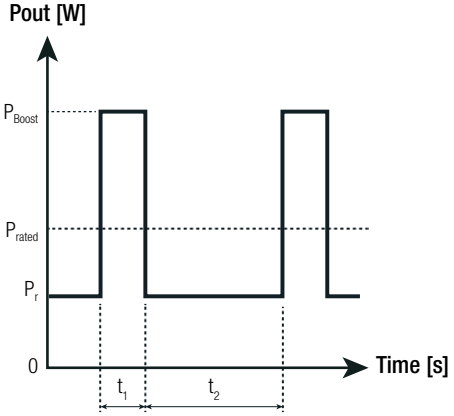

Note14:The input voltage range covered by UL/IEC 60601-1 is limited to 100–240VAC.
The full 100–277VAC input range is covered by all other applicable standards.

## BOOST POWER DUTY CYCLE

| Parameters | Units | RACM240-12SK/277<br>RACM240-15SK/277 | RACM240-24SK/277<br>RACM240-36SK/277<br>RACM240-48SK/277<br>RACM240-54SK/277 |
|---|---|---|---|
| $P_{rated}$= rated output power | [W] | refer to rating Graphs above | |
| $P_{Boost}$= Boost power | [W] | 300W max. | 330W max. |
| $P_r$= recovery output power | [W] | use calculation | |
| $t_1$= peak time set | [s] | 5s max. | |
| $t_2$= recovery time | [s] | min. 11 x $t_1$ | |
| k= heat dissipation factor | [ ] | 2.5 | 1.5 |

**Calculation:**

$$P_r = \frac{P_{rated} \times (t_1 + t_2) - (P_{Boost} \times t_1)}{t_2 \times k}$$




**Practical Example (RACM240-48SK/277 for still air convection):**

Take the RACM240-48SK/277 at 277VAC input voltage and at $T_{AMB}$= 70°C, with still air convection.

$P_{Boost}$ = 330W
$P_{rated}$ = 100W
$t_1$ = 5s
$t_2$ = 11 x $t_1$
k = 2.5

$$P_r = \frac{100 \times (5 + 55) - (330 \times 5)}{55 \times 2.5} = \underline{31.6W}$$

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## SAFETY & CERTIFICATIONS

| Certificate Type (Safety) | Report Number | Standard |
|---|---|---|
| Audio/Video, information and communication technology equipment - Part1: Safety requirements 4th Edition | E491408-A6047-UL | UL62368-1 4th Edition |
| | | CAN/CSA-C22.2 No. 62368-1 4th Edition |
| Audio/Video, information and communication technology equipment - Part1: Safety requirements 4th Edition | 25101301201 | IEC62368-1:2023 4th Edition |
| | | EN IEC 62368-1:2024 |
| Medical electrical equipment Part 1: General requirements for basic safety and essential performance | E511305-D6008-UL | ANSI/AAMI ES60601-1:2005+A2:2010 |
| | | CAN/CSA-C22.2 No. 60601-1:14 3rd Edition |
| Medical electrical equipment Part 1: General requirements for basic safety and essential performance | 25101301301 | IEC60601-1:2005 + AM2:2020 Edition 3.2 |
| Household and similar electrical appliances – Safety – Part 1: General requirements | 64.110.25.07197.01 | IEC60335-1:2010 + A2:2016 5th Edition |
| | | EN60335-1:2012 + A16:2023 |
| Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure | | EN62233:2008 |
| Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V 3rd Edition | 085-250719601-000 | IEC61558-1:2017 3rd Edition |
| Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V Part 2: Particular requirements | | IEC61558-2-16:2021 2nd Edition |
| RoHS2 | | RoHS-2011/65/EU + AM-2015/863 |

| EMC Compliance according to EN55032 | Condition | Standard |
|---|---|---|
| Electromagnetic compatibility of multimedia equipment – Emission Requirements | | EN55032:2015 + A11:2020, Class B |

| EMC Compliance according to EN61204-3 | Condition | Standard |
|---|---|---|
| Low voltage power supplies, d.c. output Part 3: Electromagnetic compatibility (EMC) | | EN IEC 61204-3:2018, Class B |
| ESD Electrostatic discharge immunity test | Contact: ±4kV | IEC61000-4-2:2008, Criteria A<br>EN61000-4-2:2009, Criteria A |
| Radiated, radio-frequency, electromagnetic field immunity test | 10V/m (80-1000MHz),<br>3V/m (1400-2000MHz),<br>1V/m (2000-2700MHz) | IEC/EN61000-4-3:2006 + A2:2010 |
| Fast Transient and Burst Immunity | AC Port: L, N, L-N: ±2kV | IEC/EN61000-4-4:2012, Criteria A |
| Surge Immunity | AC Pot: L-N: ±0.5, 1, 2kV<br>L-PE, N-PE: ±1, 2kV | IEC/EN61000-4-5:2014 + A1:2017, Criteria A |
| Immunity to conducted disturbances, induced by radio-frequency fields | 10Vrms (0.15-80MHz) | IEC61000-4-6:2013, Criteria A<br>EN61000-4-6:2014, Criteria A |
| Power Magnetic Field Immunity | 30A/m | IEC61000-4-8:2009, Criteria A<br>EN61000-4-8:2010, Criteria A |
| Voltage Dips | 100% (0.5P, 1.0P), 60%, 30%, 20% | EN61000-4-11:2004 + A1:2017, Criteria A |
| Voltage Interruptions | 100% | EN61000-4-11:2004 + A1:2017, Criteria B |
| Limits of Voltage Fluctuations & Flicker | | EN61000-3-3:2013 + A1:2019 |
| Limits of Harmonic Current Emissions | | EN IEC 61000-3-2:2019 |

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## SAFETY & CERTIFICATIONS

| EMC Compliance according to EN60601-1 | Condition | Standard |
|---|---|---|
| Medical electrical equipment Part 1-2: General requirements for basic safety and essential performance | | EN60601-1-2:2015 + A1:2021 |
| ESD Electrostatic discharge immunity test | Contact: ±4kV | IEC61000-4-2:2008<br>EN61000-4-2:2009 |
| Radiated, radio-frequency, electromagnetic field immunity test | 10 V/m (80-2700MHz),<br>27V/m (385MHz),<br>28V/m (450MHz),<br>9V/m (710, 745, 780MHz),<br>28V/m (810, 870, 930MHz),<br>28V/m (1720, 1845, 1970MHz),<br>28V/m (2450MHz),<br>9V/m (5240, 5500, 5785MHz | IEC/EN61000-4-3:2006 + A2:2010 |
| Fast Transient and Burst Immunity | AC Port: L, N, L-N: ±2kV | IEC/EN61000-4-4:2012 |
| Surge Immunity | AC Pot: L-N: ±0.5, 11 2kV<br>L-PE, N-PE: ±1. 2kV | IEC/EN61000-4-5:2014 + A1:2017 |
| Immunity to conducted disturbances, induced by radio-frequency fields | 3Vrms (0.15-80MHz),<br>6Vrms (ISM bands) | IEC61000-4-6:2013<br>EN61000-4-6:2014 |
| Power Magnetic Field Immunity | 30A/m | IEC61000-4-8:2009<br>EN61000-4-8:2010 |
| Voltage Dips | 100% (0.5P, 1.0P), 30% | EN61000-4-11:2004 + A1:2017 |
| Voltage Interruptions | 100% | EN61000-4-11:2004 + A1:2017 |
| Limits of Voltage Fluctuations & Flicker | | EN61000-3-3:2013 |
| Limits of Harmonic Current Emissions | | IEC61000-3-2:2005 + A2:2009 |

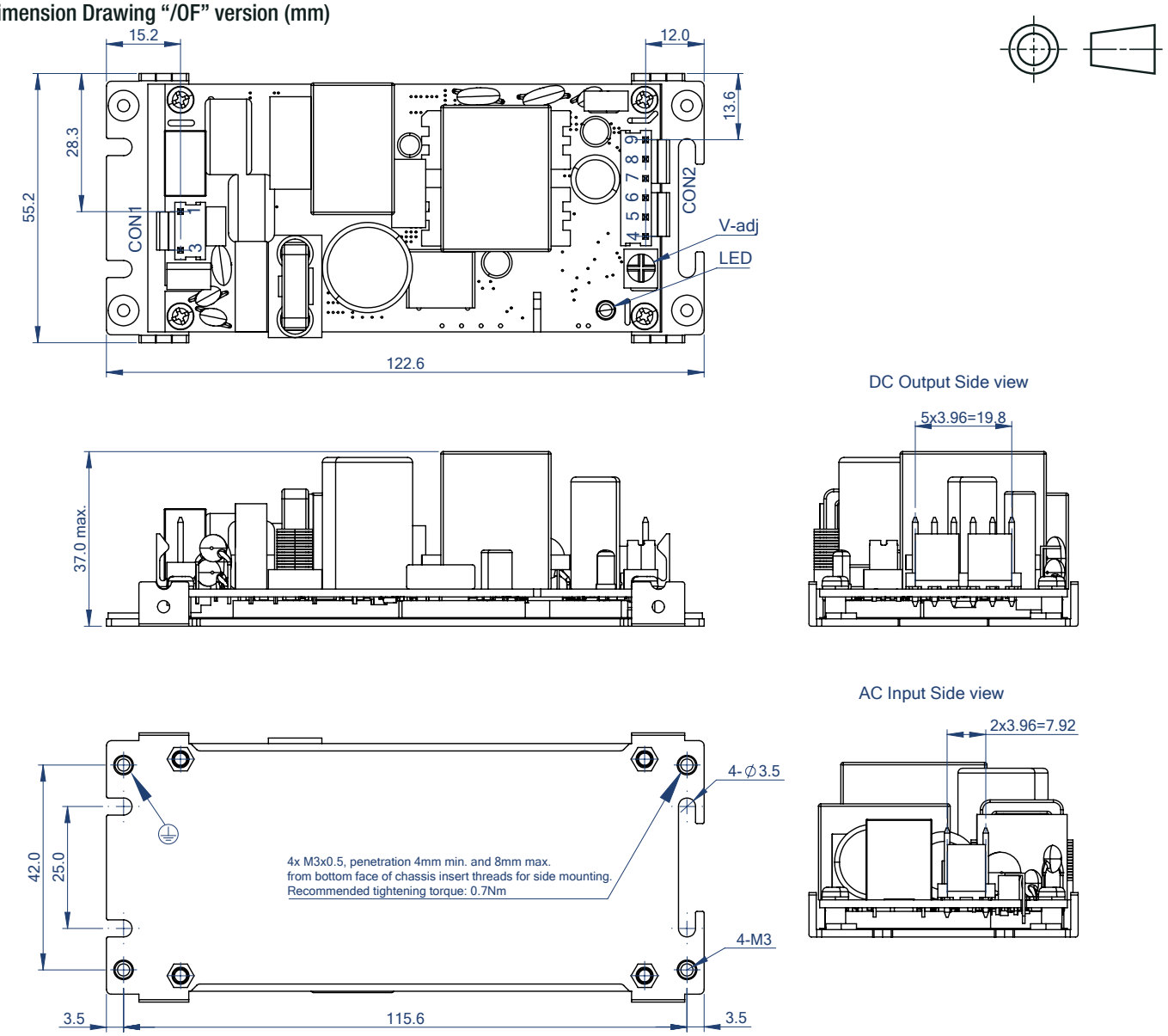
## DIMENSION & PHYSICAL CHARACTERISTICS

| Parameter | Type | Value |
|---|---|---|
| Materials | PCB | FR4, (UL94-V0) |
| | chassis | aluminum |
| Dimension (LxWxH) | "/OF" & "/SI/OF" | 122.6 x 55.2 x 37.0mm<br>4.82 x 2.17 x 1.45 inch |
| | "/ENC" & "/SI/ENC" | 122.6 x 62.2 x 38.0mm<br>4.82 x 2.44 x 1.49 inch |
| Weight | "/OF" | 210g typ.<br>0.50 lbs |
| | "/SI/OF" | 220g typ.<br>0.54 lbs |
| | "/ENC" | 240g typ.<br>0.52 lbs |
| | "/SI/ENC" | 250g typ.<br>0.55 lbs |

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## DIMENSION & PHYSICAL CHARACTERISTICS

### Dimension Drawing "/OF" version (mm)




Note14: Every indicated fixation points can be used for PE connections

### Connector Information

**AC Input (CON1)**

| # | Function | Connector |
|---|---|---|
| 1 | VAC in (N) | 3 Pins (Pin2 removed) |
| 3 | VAC in (L) | with 3.96mm pitch |

**DC Output (CON2)**

| # | Function | Connector |
|---|---|---|
| 4, 5, 6 | +Vout | 6 Pins |
| 7, 8, 9 | -Vout | with 3.96mm pitch |
| FC= Fixing centers | | |

**Compatible Connector**

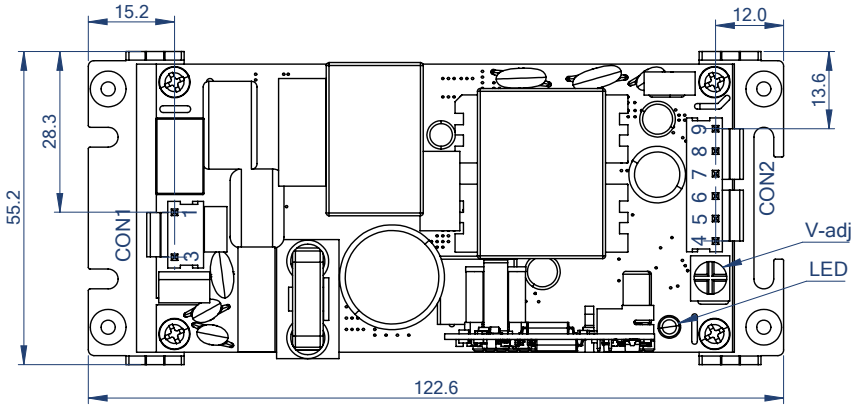
| Housing | Crimp Terminal |
|---|---|
| Molex 41695 Series or equivalent | Molex 2478 Series or equivalent |

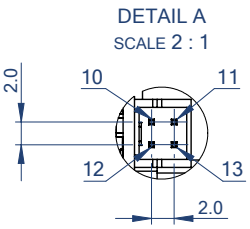
Tolerance: xx.x= ±0.5mm
xx.xx= ±0.25mm

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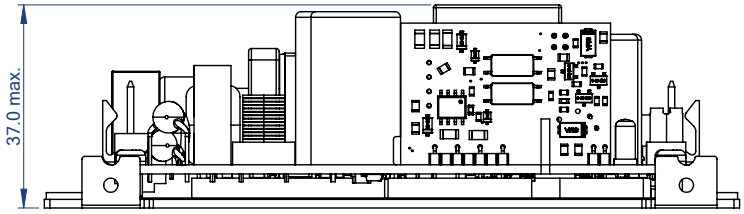
## DIMENSION & PHYSICAL CHARACTERISTICS

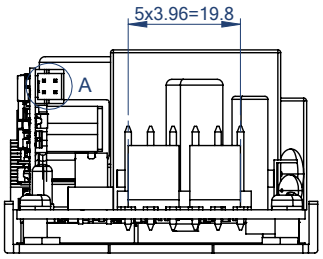
### Dimension Drawing "/SI/OF" version with Signal Interface Connector (mm)



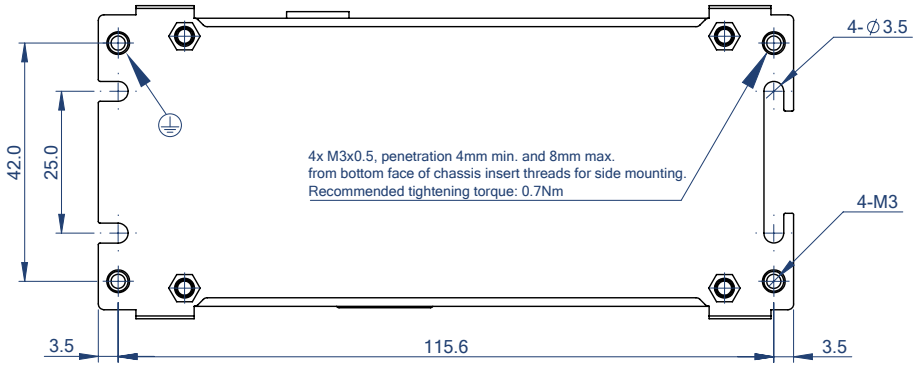



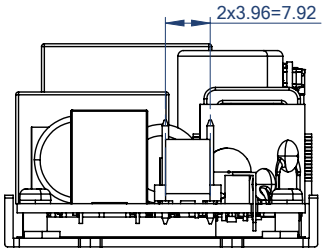

DC Output Side view




AC Input Side view




Note14: Every indicated fixation points can be used for PE connections

### Connector Information

**AC Input (CON1)**

| # | Function | Connector |
|---|---|---|
| 1 | VAC in (N) | 3 Pins (Pin2 removed) |
| 3 | VAC in (L) | with 3.96mm pitch |

**DC Output (CON2)**

| # | Function | Connector |
|---|---|---|
| 4, 5, 6 | +Vout | 6 Pins |
| 7, 8, 9 | -Vout | with 3.96mm pitch |
| FC= Fixing centers | | |

### Connector Information

**Signal Interface (CON3)**

| # | Function | Connector |
|---|---|---|
| 10 | ON/OFF CTRL | HRS DF11-4DP-2DS (24) |
| 11 | AC_ Fail | |
| 12 | 5VSB | |
| 13 | SGND | |

**Compatible Connector**

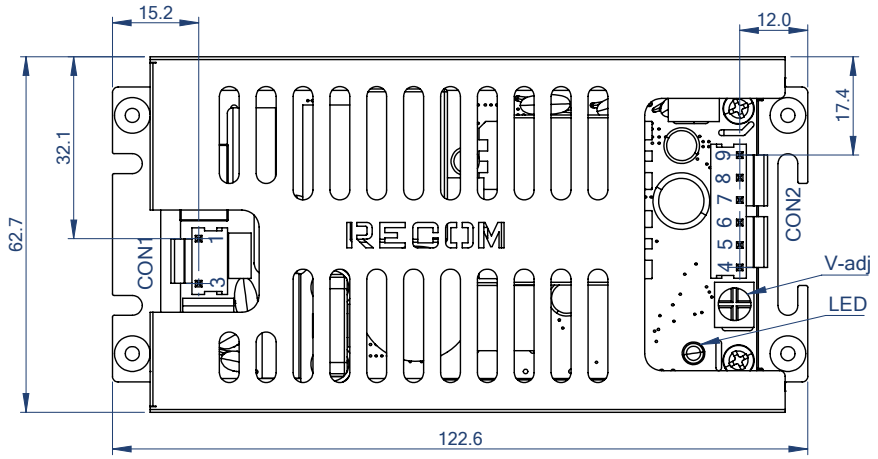
| Housing | Crimp Terminal |
|---|---|
| Molex 41695 Series or equivalent | Molex 2478 Series or equivalent |

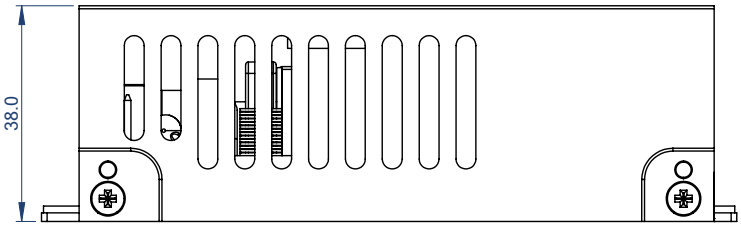
Tolerance: xx.x= ±0.5mm
xx.xx= ±0.25mm

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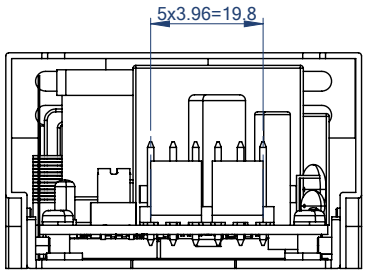
## DIMENSION & PHYSICAL CHARACTERISTICS

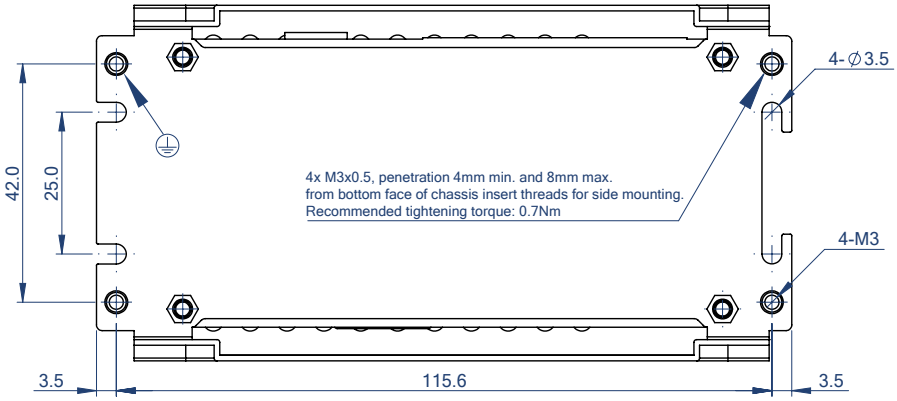
### Dimension Drawing "/ENC" version (mm)



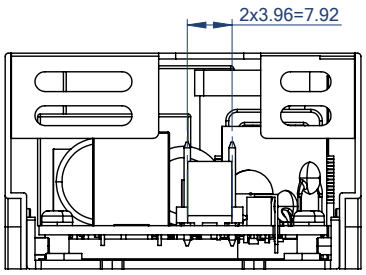




DC Output Side view




AC Input Side view




Note14: Every indicated fixation points can be used for PE connections

### Connector Information

**AC Input (CON1)**

| # | Function | Connector |
|---|---|---|
| 1 | VAC in (N) | 3 Pins (Pin2 removed) |
| 3 | VAC in (L) | with 3.96mm pitch |

**DC Output (CON2)**

| # | Function | Connector |
|---|---|---|
| 4, 5, 6 | +Vout | 6 Pins |
| 7, 8, 9 | -Vout | with 3.96mm pitch |
| FC= Fixing centers | | |

**Compatible Connector**

| Housing | Crimp Terminal |
|---|---|
| Molex 41695 Series or equivalent | Molex 2478 Series or equivalent |

Tolerance: xx.x= ±0.5mm
xx.xx= ±0.25mm

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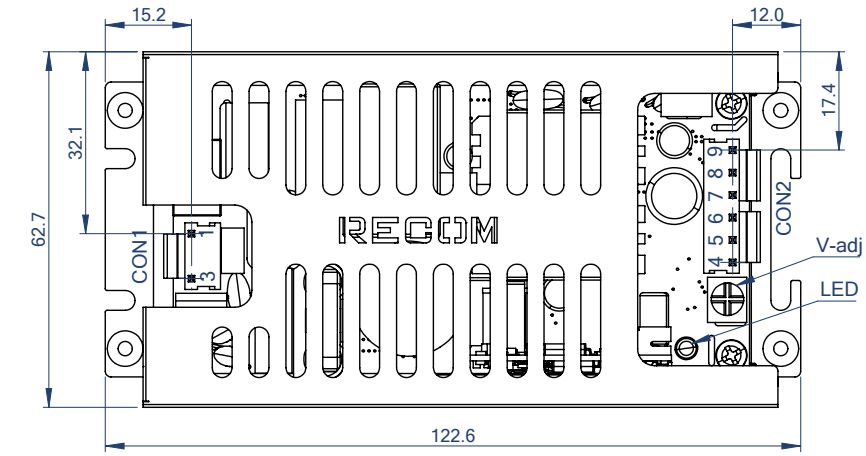
# RACM240-K Series ◊ AC/DC Power Supply

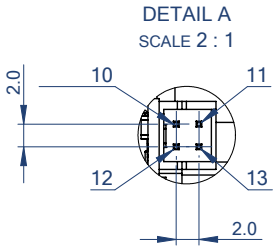
240W ◊ Input: 100V-240VAC

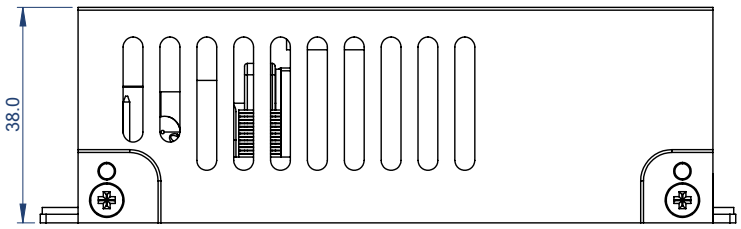
RECOM AC/DC Converter

## Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

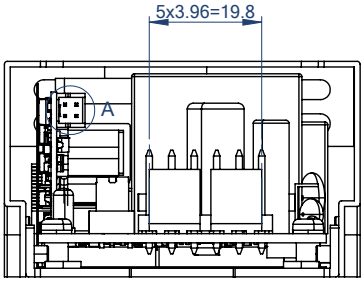
### Dimension Drawing "/SI/ENC" version with Signal Interface Connector (mm)

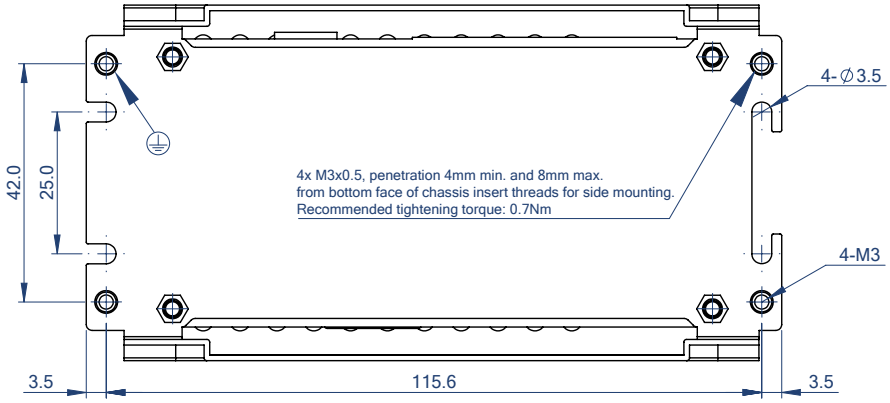


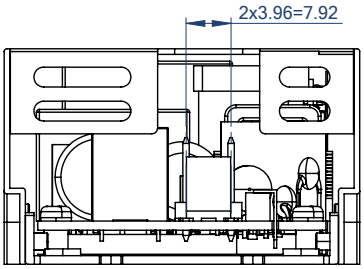




DC Output Side view




AC Input Side view




Note14: Every indicated fixation points can be used for PE connections

### Connector Information

**AC Input (CON1)**

| # | Function | Connector |
|---|---|---|
| 1 | VAC in (N) | 3 Pins (Pin2 removed) with 3.96mm pitch |
| 3 | VAC in (L) | |

**DC Output (CON2)**

| # | Function | Connector |
|---|---|---|
| 4, 5, 6 | +Vout | 6 Pins with 3.96mm pitch |
| 7, 8, 9 | -Vout | |
| FC= Fixing centers | | |

### Connector Information

**Signal Interface (CON3)**

| # | Function | Connector |
|---|---|---|
| 10 | ON/OFF CTRL | HRS DF11-4DP-2DS (24) |
| 11 | AC_ Fail | |
| 12 | 5VSB | |
| 13 | SGND | |

**Compatible Connector**

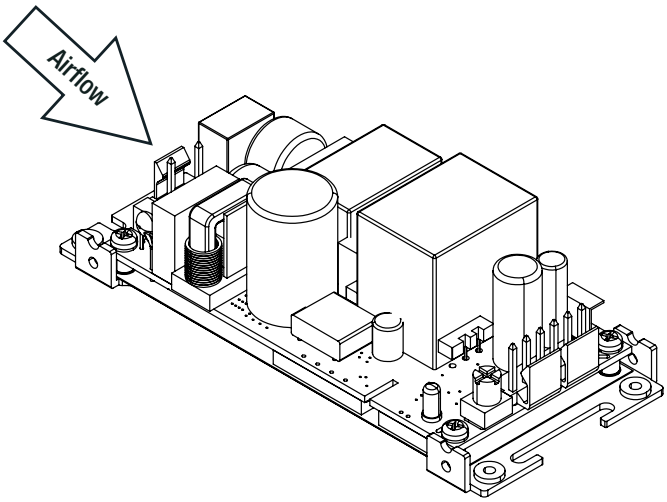
| Housing | Crimp Terminal |
|---|---|
| Molex 41695 Series or equivalent | Molex 2478 Series or equivalent |

Tolerance: xx.x= ±0.5mm
xx.xx= ±0.25mm

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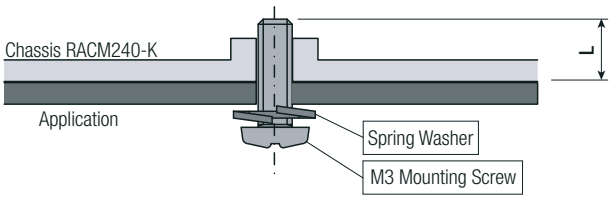
## INSTALLATION & APPLICATION

**Preferred airflow direction**
valid for all different models



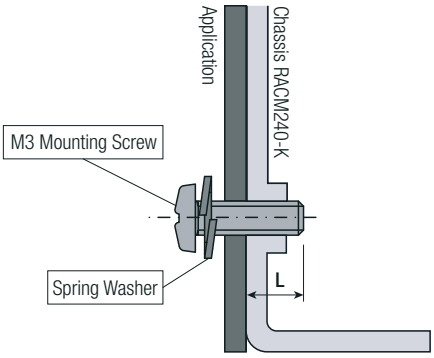

### Mounting Equipment

Baseplate Mounting




Recommended mounting tightening torque= 0.7Nm.
L= 4mm min. / 8mm max.

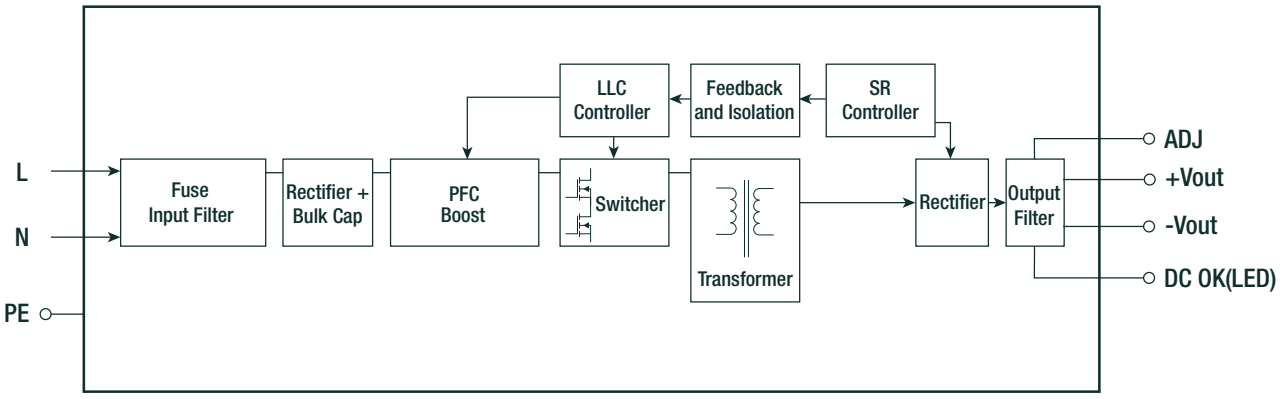
Side Mounting




Recommended mounting tightening torque= 0.7Nm.
L= 4mm min. / 8mm max.

## BLOCK DIAGRAM

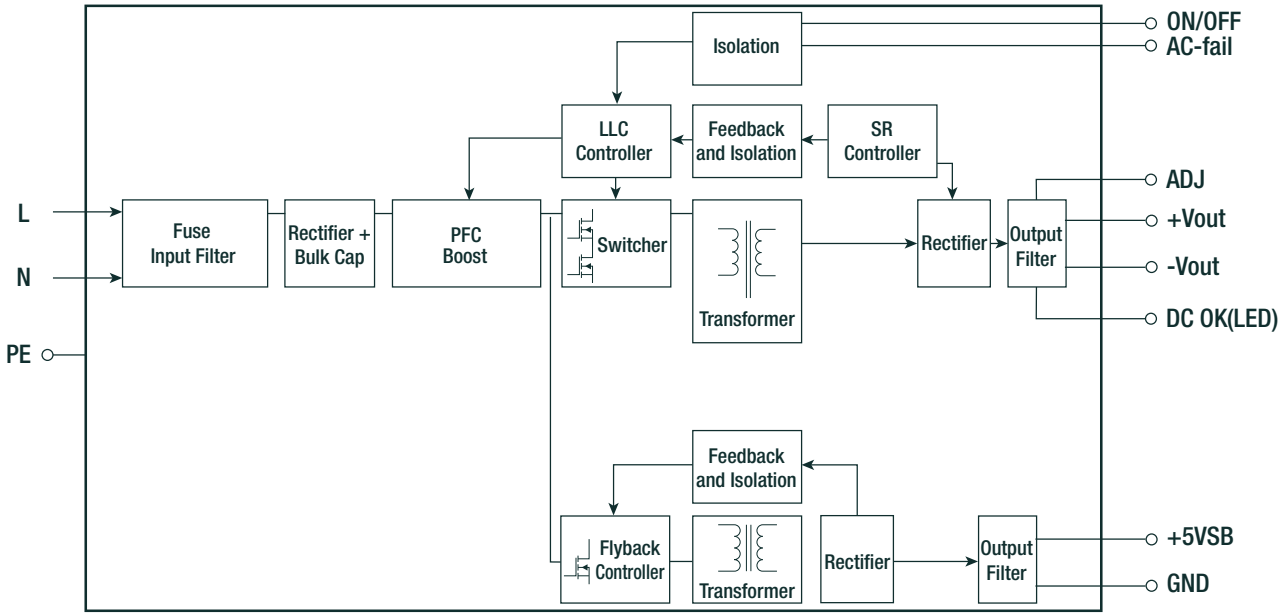
**valid for "/OF" & "/ENC" Versions**




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## BLOCK DIAGRAM

valid for "/SI" Versions




## PACKAGING INFORMATION

| Parameter | Type | Value |
|---|---|---|
| Packaging Dimension (LxWxH) | tray | 415.0 x 365.0 x 61.0mm |
| Packaging Quantity | | 12pcs |
| Storage Temperature Range | | -40°C to +90°C |
| Storage Humidity | non-condensing | 95% RH max. |

The product information and specifications may be subject to changes even without prior written notice. The product has been designed for various applications; its suitability lies in the responsibility of each customer. The products are not authorized for use in safety-critical applications without RECOM's explicit written consent. A safety-critical application is an application where a failure may reasonably be expected to endanger or cause loss of life, inflict bodily harm or damage property. The applicant shall indemnify and hold harmless RECOM, its affiliated companies and its representatives against any damage claims in connection with the unauthorized use of RECOM products in such safety-critical applications.

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